WHAT IS CLAIMED IS:

1	 A method for verifying and implementing a requested modification to an 			
2	advertised route in a data communications network, comprising the steps of:			
3	receiving at a network provisioning system a customer-generated route			
4	advertisement modification request to cause one of (a) provisioning a new route			
5	advertisement or (b) withdrawal of an existing route advertisement;			
6	validating the new route advertisement when the customer-generated route			
7	advertisement modification constitutes provisioning of said new route advertisement and			
8	rejecting said new route advertisement if unable to be verified;			
9	entering the customer-generated route advertisement modification into an official			
10	routing database to make such route advertisement modification available to providers of			
11	network access; and			
12	periodically checking at least one of such providers of network access to verify			
13	whether such route advertisement modification remains effective.			
1	2. The method according to claim 1 wherein the step of validating a new			
2	route advertisement includes the steps of:			
3	(a) checking whether the customer owns a network address associated with the			
4	new route advertisement;			
5	(b) checking whether a conflict exists between any existing route advertisement			
6	and the new route advertisement;			
7	(c) checking whether an alternate route advertisement corresponds to the new			
8	route advertisement; and			
9	(d) checking whether the new route advertisement violates a local routing policy.			
1	3. The method according to claim 2 wherein the step of checking whether the			
2	customer owns the network address associated with the new route advertisement includes			
3	the step of querying a database containing a registry of network addresses.			

1	4.	The method according to claim 2 wherein the step of checking whether a		
2	conflict exists between any existing route advertisement and the new route advertisement			
3	includes the step of querying the official routing database and a customer provisioning			
4	database.			
1	5.	The method according to claim 1 wherein the customer enters the route		
2	advertisement modification via a web interface.			
1	6.	The method according to claim 1 wherein the customer enters the route		
2	advertisemer	nt modification using via a Border Gateway Protocol.		
1	7.	The method according to claim 1 wherein the customer enters the route		
2	advertisemen	nt modification statically.		
	8.	A method for verifying and implementing a request to advertise a newly		
1		route in a data communications network, comprising the steps of:		
2 3 -	receiving at a network provisioning system a customer-generated request to			
	advertise a newly provisioned route;			
4 5	validating the advertisement for the newly provisioned route and rejecting said			
	route advertisement if unable to be verified;			
6 7	entering the customer-generated route advertisement into an official routing			
	database to make such route advertisement available to providers of network access; and			
8 9	periodically checking at least one of such providers of network access to verify			
0		h route advertisement remains effective.		
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1	9.	The method according to claim 8 wherein the step of validating a new		
2	route advert	isement includes the steps of:		
3	(a) checking whether the customer owns a network address associated with the			
4	new route advertisement;			
5	(b) checking whether a conflict exists between any existing route advertisement			
6	and the new	route advertisement;		

7	(c) checking whether an alternate route advertisement corresponds to the new			
8	route advertisement; and			
9	(d) checking whether the new route advertisement violates a local routing policy.			
1	10. The method according to claim 9 wherein the step of checking whether the			
2	customer owns the network address associated with the new route advertisement includes			
3	the step of querying a database containing a registry of network addresses.			
1	11. The method according to claim 9 wherein the step of checking whether a			
2	conflict exists between any existing route advertisement and the new route advertisement			
3	includes the step of querying the official routing database and a customer provisioning			
4	database.			
1	12. The method according to claim 8 wherein the customer enters the route			
2	advertisement modification via a web interface.			
1	13. The method according to claim 8 wherein the customer enters the route			
2	advertisement modification using via a Border Gateway Protocol.			
1	14. The method according to claim 8 wherein the customer enters the route			
2 advertisement modification statically.				
1	15. A method for verifying and implementing a requested withdrawal of an			
2	advertised route in a data communications network, comprising the steps of:			
3	receiving at a network provisioning system a customer-generated request to			
4	withdraw an existing route advertisement;			
5	entering the customer-generated route withdrawal request into an official routing			
6	database to make such route withdrawal request to providers of network access; and			
7	periodically checking at least one of such providers of network access to verify			
8	whether such route withdrawal request remains effective.			

- 1 16. The method according to claim 15 further including the step of verifying
- 2 whether the customer making the route withdrawal request is authorized to do so.